## IN MATHIESON CHE CAL CORPOR.

CONFIDENTIAL

to J. i. Caspari

Ar East Alton

6ATE

December 4, 1961

FROM 9. 1. Pad

AT East Alton

COPY TO

V. G. Willis

Summer Fusee Assemblies

Signal-lares

The problem of providing fusee units which can be interlocked end to end to give any desired burning time can be solved by using commercial fusee units as follows:

- 1. Prime both ends with standard mix and cap with two scratch caps.
- 2. Supply plastic or steel connecting sleeves to permit joining.
- 3. Initiation of prime at base of Susee would burn across joing and ignite next fusee.
- 4. Cost, Quality Control and availability would be excellent as these could be supplied from our Peru Plant.

	Size 1	Size 2	Size 3
O.D. of Tube (approx.)	0.745*	0.930"	1.040"
Candlepower (Ave.)	15	70	125
Burning Rate (inches/min.)	0.5	.7 to.9*	.8 tc 1.0*
Length Required (for 30 minutes)	15"	21 to 27"	24 to 30"
Standard Sizes	15 min.	10, 15, 20 min.	10 min.

It is estimated that these fusees will cost 20 to 30 cents each in gross lots. Adding prime and an extra cap will increase this by 30 - 50%. The connecting sleeves should cost 5 to 50 cents each depending on the complexity required.

Development of a sleeve for the above described unit should cost about \$5,000, again depending on the complexity required.

Please clarify your requirements and indicate if the above type system can be used.

25**X**1 25**X**1

Sanitized Copy Approved for Release 2011/05/25 : CIA-RDP78-03642A002400010055-4